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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/609,086	06/27/2003	Zhicheng Li	44662B (1062-014C1)	7520

25215 7590 04/10/2007
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PONTIAC, MI 48342

EXAMINER

CHEN, BRET P

ART UNIT	PAPER NUMBER
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1762

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/10/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/609,086

Applicant(s)

LI ET AL.

Examiner

B. Chen

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-15, 17-25, 27-30 and 32-36 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-15, 17-25, 27-30 and 32-36 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

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DETAILED ACTION

Claims 1-4, 6-15, 17-25, 27-30, and 32-36 are pending in this application. Amended claims 1-3 are noted in the preliminary amendment dated 1/25/07.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/25/07 has been entered.

Claim Objections

Claims 1-4, 6-15, 17-25, 27-30, and 32-36 are objected to because of the following informalities listed below. Appropriate correction is required.

In claim 10 line 3, the word --and-- should be inserted after the final comma to make a proper Markush group. The same issue applies to claims 14, 17.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claims 1-4, 6-15, 17-25, 27-30, and 32-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 6 line 2, the term "the substrate" lacks antecedent basis and/or is confusing as to what it is referring to the surface. The same issue applies to claim 19.

In claim 21, the applicant requires the primary amine to be present in an amount up to about 50 parts by volume of the second component. This appears to contradict independent claim 1, from which claim 21 depends on, which requires the amount to be between about 10% and about 40%. Appropriate amendments are requested. The same issue applies to claim 24.

In claim 30, the term "the agent for controlling static" lacks antecedent basis and/or is confusing as to what it is referring to.

In claim 36 step ii), the applicant requires the static controlling agent to be selected from potassium salt or carbon black. This appears to contradict independent claim 2 step iii), from which claim 36 depends on, which requires the static controlling agent to be a potassium salt. Appropriate amendments are requested.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-4, 6-15, 17-25, 27-30, and 32-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kronz et al. (5,814,398). Kronz discloses of an in situ method of producing a vehicle bed liner by using a two component polyurethane, polyurea or polyurethane/polyurea hybrid to create the liner (col.1 line 65 – col.2 line 7), wherein a spray gun is used to create the sides of the liner by maintaining the two components separately and finally mixing together the two polymer components just prior to exiting the spray gun for application to the vehicle bed (col.3 lines 27-31). The polymer composition reaches its gel point almost immediately upon contact with the vehicle bed to prevent running or sagging of the polymer material (col.4 lines 47-67) and is subsequently cured (col.9 lines 5-7). The polymer composition can consist of a first component having an isocyanate and a second component which contains two amines (col.2 line 8 – col.3 line 14) and the thickness of the coating can be 1/8 to 1/2 inches thick (col.8 lines 12-19). It should be noted that Kronz does not teach blistering, cracking, or charring to the coating composition in the bed liner. However, the reference fails to teach a thickness of 1mm to 10mm.

It is noted that the reference clearly teaches that the coating can be 1/8 to 1/2 inches thick as noted above, which converts to approximately 3.2 to 12.7 mm. Overlapping ranges are *prima facie* evidence of obviousness. It would have been obvious to one having ordinary skill in the art to have selected the portion of Kronz's thickness range that corresponds to the claimed range.

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In addition, the reference remains silent on the use of the specific isocyanate and amine. It is noted above that the reference clearly teaches the use of an isocyanate and two amines and lists some materials which fall into that category. One skilled in the art after reading Kronz would realize that any other isocyanates and amines could be utilized with the expectation of success. It would have been obvious to one skilled in the art to utilize a specific isocyanate and amine with the expectation of obtaining similar results.

The limitations of claims 2-4, 6-15, 17-25, 27-30, and 32-36 have been addressed above.

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to B. Chen whose telephone number is (571) 272-1417. The examiner can normally be reached on 7:30am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Bc
4/7/06


BRET CHEN
PRIMARY EXAMINER